

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-4 (Cancelled).

Claim 5 (Currently Amended): A process for producing a hexagonal lithium-cobalt composite oxide for a lithium secondary cell, which comprises:

dry blending a cobalt oxyhydroxide powder having an average particle size of from 1 to 20  $\mu\text{m}$  and a specific surface area of from 2 to 200  $\text{m}^2/\text{g}$ , a lithium carbonate powder having an average particle size of from 1 to 50  $\mu\text{m}$  and a specific surface area of from 0.1 to 10  $\text{m}^2/\text{g}$ , and a powder of an oxide of metal element M having an average particle size of at most 10  $\mu\text{m}$  and a specific surface area of from 1 to 100  $\text{m}^2/\text{g}$ [[,]]; and

firing the ~~a~~ mixture of the powders at a temperature of from 850 to 1,000°C in an oxygen-containing atmosphere,

wherein the hexagonal lithium-cobalt composite oxide is represented by the formula  $\text{LiCo}_{1-x}\text{M}_x\text{O}_2$ , wherein x is  $0.0005 \leq x \leq 0.02$  and M is at least one member selected from the group consisting of Ta, Ti, Nb, Zr and Hf, and which has a half-width of the diffraction peak for (110) face at  $2\theta = 66.5 \pm 1^\circ$ , of from 0.070 to 0.180°, as measured by the X-ray diffraction using  $\text{CuK}\alpha$  as a ray source.

Claim 6 (Currently Amended): ~~The process for producing the hexagonal lithium-cobalt composite oxide for a lithium secondary cell~~ according to Claim 5, wherein the mixture is fired ~~for~~ at time ranging from 4 to 30 hours.

Claims 7-11 (Cancelled).

Claim 12 (New): The process according to Claim 5, wherein the half-width of the diffraction peak for (110) face ranges from 0.100 to 0.165°.

Claim 13 (New): The process according to Claim 5, wherein a packing press density of the hexagonal lithium-cobalt composite oxide ranges from 2.90 to 3.35 g/cm<sup>3</sup>.

Claim 14 (New): The process according to Claim 5, wherein a packing press density of the hexagonal lithium-cobalt composite oxide ranges from 3.05 to 3.25 g/cm<sup>3</sup>.

Claim 15 (New): The process according to Claim 5, wherein the cobalt oxyhydroxide powder has an average particle size ranging from 4 to 15 μm.

Claim 16 (New): The process according to Claim 5, wherein the cobalt oxyhydroxide powder has a specific surface area ranging from 20 to 100 m<sup>2</sup>/g.

Claim 17 (New): The process according to Claim 5, wherein the lithium carbonate powder has an average particle size ranging from 5 to 30 μm.

Claim 18 (New): The process according to Claim 5, wherein the lithium carbonate powder has a specific surface area ranging from 0.3 to 3 m<sup>2</sup>/g.

Claim 19 (New): The process according to Claim 5, wherein the mixture is fired at a time ranging from 8 to 20 hours.

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Claim 20 (New): The process according to Claim 5, wherein an oxygen concentration in the oxygen-containing atmosphere ranges from 10 to 100 volume%.

SUPPORT FOR THE AMENDMENTS

Claims 5 and 6 are currently amended.

Claims 2-5 are canceled. Claims 1 and 7-11 were previously cancelled.

Claims 12-20 are added.

Claims 5 and 6 have been amended in accordance with the Examiner's suggestion, and for minor editorial purposes. Support for the amendment to claim 5 can be found in the specification at page 5, line 5, as originally filed.

Claims 12-20 are supported by the specification at page 6, line 2, page 7, lines 20-21, page 8, lines 14-15 and lines 25-26, page 9, lines 7-9, page 11, lines 8-9, and page 12, lines 1-2 and 14-16, as originally filed.

No new matter has been added by the amendments. Accordingly, entry of the amendment is requested.

Upon entry of the amendment, claims 5-6 and 12-20 will be pending in the present application.